

### REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 11, 14, 15, and 24-26 are currently pending. Claims 11, 14, and 15 have been amended; and Claims 24-26 have been added by the present amendment. The changes and additions to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, the drawings were objected to as containing various informalities; the specification was objected to as containing various informalities; Claims 10-15 were objected to as containing various informalities; Claims 10 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,746,958 to Gustafsson (hereinafter “the ‘958 patent”) in view of U.S. Patent No. 3,538,595 to Barnes (hereinafter “the ‘595 patent”); Claims 11 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘958 patent in view of the ‘595 patent and U.S. Patent No. 6,228,301 to Taguchi et al. (hereinafter “the ‘301 patent”); Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘958 patent in view of the ‘595 patent and U.S. Patent No. 5,301,881 to Hayashi et al. (hereinafter “the ‘881 patent”); Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘958 patent in view of the ‘595, ‘881, and ‘301 patents; Claims 10 and 12 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 6 of co-pending Application No. 11/481,790 (hereinafter “the ‘790 application”) in view of the ‘958 patent; Claims 11 and 14 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 6 of the co-pending ‘790 application in view of the ‘958 and ‘301 patents; Claim 13 was provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 6 of the

co-pending '790 application in view of the '958 and '881 patents; and Claim 15 was provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claim 6 of the co-pending '790 application in view of the '958, '301, and '881 patents.

Regarding the objections to the drawings, Applicant respectfully submits that the objections to the drawings have been overcome by the previous amendment to the drawings, as indicated by the Advisory Action.

Regarding the objections to the specification, Applicant respectfully submits that the objections to the specification have been overcome by the previous amendment to the specification, as indicated by the Advisory Action.

Regarding the objections to Claims 10-15, Applicant respectfully submits that the objections to Claims 10-15 have been overcome by the previous amendments to Claims 11, 14, and 15 and previous cancellation of Claims 10, 12, and 13, as indicated by the Advisory Action.

Regarding the rejection of Claims 10 and 12 under 35 U.S.C. § 103(a), Applicant respectfully submits that the rejection of Claims 10 and 12 is rendered moot by the previous cancellation of those claims.

Amended Claim 11 is directed to a manufacturing apparatus to manufacture a cylindrical main body of a wood-like molded product through extrusion molding, the apparatus comprising: (1) a first crushing device configured to crush a resin waste material; (2) a second crushing device configured to crush a wood waste material; (3) a third crushing device configured to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips, wherein the first crushing device, the second crushing device, and the third crushing device are each separate crushing devices; (4) a grinding device configured to grind the fine chips into a fine powder; (5) a blending mixer configured

to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material; (6) an extrusion molding device configured to heat and melt the mixed material, and to mold the mixed material into a cylindrical shape through extrusion molding; (7) a sizer member which includes an opening portion having an inner diameter which is substantially the same as an outer diameter of an extrusion mold product in the cylindrical shape produced by the extrusion molding device through the extrusion molding, and configured to adjust a sectional shape and a dimension of the extrusion mold product by inserting the extrusion mold product into the opening portion; and (8) a cutting device configured to cut the extrusion mold product, of which the sectional shape and the dimension are adjusted by the sizer member, into a predetermined length, thus forming the cylindrical main body.

Regarding the rejection of Claim 11 under 35 U.S.C. § 103(a), the '958 patent is directed to a method of producing a wood-thermoplastic composite material. The '595 patent is directed to a process for producing container components from tubular elements. However, Applicant respectfully submits that the '958 and '595 patents, taken together or in proper combination, fail to disclose a third crushing device configured to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips, wherein the first crushing device, the second crushing device, and the third crushing device are each separate crushing devices; a grinding device configured to grind the fine chips into a fine powder; and a blending mixer configured to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material. Moreover, the Office Action acknowledges that the '958 and '595 patents fail to disclose a third crushing device configured to further crush the crushed wood waste material crushed by the second

crushing device, to produce fine chips, and a grinding device to grind the fine chips into a fine powder.<sup>1</sup> Rather, the Office Action relies on the '301 patent for such a teaching.

The '301 patent is directed to a cement-bonded wood chip product, resin bonded wood chip product, simulated wood product, and manufacturing method thereof. However, Applicant respectfully submits that the '301 patent does not disclose a third crushing device configured to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips, wherein the first crushing device, the second crushing device, and the third crushing device are each separate crushing devices; a grinding device configured to grind the fine chips into a fine powder; and a blending mixer configured to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material. Rather, the '301 patent discloses a manufacturing method of a simulated wood product, in which, by means of pulverizing recycled wooden members and recycled resinous members after they have been mixed, a mixing process and the pulverizing process can be incorporated into one line, reducing space as well as work in a plant, and improving production efficiency.<sup>2</sup> The '301 patent does not disclose a third crushing device configured to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips, wherein the first crushing device, the second crushing device, and the third crushing device are each separate crushing devices; and a grinding device configured to grind the fine chips into a fine powder prior to mixing by a blending mixer.

Thus, no matter how the teachings of the '958, '595, and '301 patents are combined, the combination does not teach or suggest a third crushing device configured to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips, wherein the first crushing device, the second crushing device, and the third crushing

---

<sup>1</sup> Office Action dated December 13, 2006, see page 7, paragraph 1.

<sup>2</sup> The '301 patent, see column 2, lines 56-63.

device are each separate crushing devices; a grinding device to grind the fine chips into a fine powder; and a blending mixer to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material, as recited in Claim 11.

Accordingly, for the reasons stated above, Applicant respectfully submits that the rejection of Claim 11 is rendered moot by the present amendment to Claim 11.

Regarding the rejection of Claim 13 under 35 U.S.C. § 103(a), Applicant respectfully submits that the rejection of Claim 13 is rendered moot by the previous cancellation of that claim.

Amended Claim 14 recites limitations analogous to the limitations recited in Claim 11. Moreover, Claim 14 has been amended in a manner analogous to the amendments to Claim 11. Accordingly, for reasons analogous to the reasons stated above for the patentability of Claim 11, Applicant respectfully submits that the rejection of Claim 14 is rendered moot by the present amendment to Claim 14.

Amended Claim 15 recites limitations analogous to the limitations recited in Claim 11. Moreover, Claim 15 has been amended in a manner analogous to the amendments to Claim 11. However, the Office Action cites the '881 patent, in addition to the '958, '595, and '301 patents, in the rejection of Claim 15. The '881 patent does not remedy the deficiencies of the '958, '595, and '301, as discussed above. The '881 patent is directed to a system for disposing waste. However, Applicant respectfully submits that the '881 patent does not disclose a third crushing device configured to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips, wherein the first crushing device, the second crushing device, and the third crushing device are each separate crushing devices; a grinding device to grind the fine chips into a fine powder; and a blending mixer to mix the fine powder of the wood waste material and the crushed waste material and to produce a mixed material. Accordingly, for reasons analogous to the reasons stated above

for the patentability of Claim 11, Applicant respectfully submits that the rejection of Claim 15 is rendered moot by the present amendment to Claim 15.

Regarding the obviousness-type double patenting rejection of Claims 10-15, Applicant respectfully submits that the rejection of Claims 10, 12, and 13 are rendered moot by the previous cancellation of those claims. Furthermore, the '790 application has been amended to cancel Claim 6 without prejudice, as suggested by the Examiner. Accordingly, the obviousness-type double patenting rejections of Claims 11, 14, and 15 are believed to have been overcome.

The present amendment also sets forth new Claims 24-26 for examination on the merits. Applicant respectfully submits that Claims 24-26 are supported by the originally filed specification and do not add new matter.<sup>3</sup> New Claims 24-26, which depend from Claims 11, 14, and 15 respectively, recite a first path configured to supply the crushed resin waste material obtained from the first crushing device to the blending mixer; and a second path configured to supply the fine powder of the wood waste material obtained from the grinding device to the blending mixer. Applicant notes that this more detailed feature of the claimed advancements is not disclosed or suggested by the art of record.

Thus, it is respectfully submitted that independent Claims 11, 14, and 15 (and all associated dependent claims) patentably define over the cited patents.

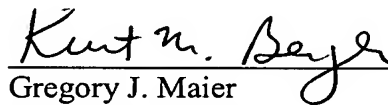
---

<sup>3</sup> For a non-limiting example, see Figure 6 of the present application.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Gregory J. Maier  
Attorney of Record  
Registration No. 25,599

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 03/06)

Kurt M. Berger, Ph.D.  
Registration No. 51,461

I:\ATTY\JM\PROSECUTION WORK\264121us\264121US-RCE.DOC